- 7. (Amended)The method according to [one of the preceding claims] <u>claim 1</u>, wherein a graph comparison function is used, which comprises a jet comparison function that takes into account the similarity of the jets corresponding to one another.
- 10. (Amended) The method according to [one of the claims 7 to 9]claim 7, wherein the jet comparison function is defined as a function of single jet comparison functions of jets corresponding to one another.
- 12. (Amended) The method according to claim 10 [or 11], wherein sub-jets of the corresponding jets are taken into account for determining a single jet comparison, and wherein a single jet comparison function is defined as a function of sub-jet comparison functions.
- 14. (Amended) The method according to [one of the claims 7 to 13] <u>claim 7</u>, wherein different node-dependent jet comparison functions and/or single jet comparison functions and/or sub-jet comparison functions are used.
- 15. (Amended) The method according to [one of the claims 7 to 9] claim 7, in combination with claim 2, wherein the bunch jets of the reference bunch graph B^M are divided into sub-bunch jets b_k^M , and the jet comparison function between the sub-bunch jets b_k^M of the reference bunch graph and the corresponding sub-jets j_i of the image graph G' for n nodes for m recursions is calculated according to the following formulae:

$$\begin{split} S_{Jet}(B^M,G') &= \sum_n \omega_n S_n(B^M_{n},J_{n}')\text{, or} \\ S_{Jet}(B^M,G') &= \prod_n (S_n(B^M_{n},J_{n}'))^{\omega_n}\text{, wherein} \end{split}$$

 ω_n is a weighting factor for the n-th node n, and the comparison function $S_n(B_n^M, J_n')$ for the n-th node of the reference bunch graph with the n-th node of the image graph is given by:

$$\begin{split} S(B^{M},J') &= \Omega\Big(\Big\{S_{kl}(b_{k}^{M},j_{l}^{\,\prime})\Big\}\Big) =: \Omega(M)\,, \text{ with} \\ &\Omega^{(0)}(M) = \sum_{i} \omega_{i} \Omega_{i}^{(1)}(M_{i}^{(1)})\,, \text{ or} \\ &\Omega^{(0)}(M) = \prod_{i} \Big(\Omega_{i}^{(1)}(M_{i}^{(1)})\Big)^{\omega_{i}}\,, \text{ or} \\ &\Omega^{(0)}(M) = \underset{i}{\max}\Big\{\omega_{i} \Omega_{i}^{(1)}(M_{i}^{(1)})\Big\}\,, \text{ or} \end{split}$$

$$\Omega^{(0)}(M) = \underset{i}{\text{min}} \Big\{ \omega_{i} \Omega_{i}^{(1)}(M_{i}^{(1)}) \Big\} \text{ , wherein } \bigcup_{i} M_{i}^{(1)} = M$$

 $\Omega_i^{(m-1)}(M_i^{(m-1)}) = \sum_j \omega_j \Omega_j^{(m)}(M_j^{(m)})$, or

$$\Omega_i^{(m-1)}(M_i^{(1)}) = \prod_j \Bigl(\Omega_j^{(m)}(M_j^{(m)})\Bigr)^{\omega_j}$$
 , or

$$\Omega_{i}^{(m-1)}(M_{i}^{(m-1)}) = \underset{j}{max} \left\{ \omega_{i}^{(m)}(M_{j}^{(m)}) \right\}, \text{ or }$$

$$\Omega_i^{(m-1)}(M_i^{(m-1)}) = \underset{j}{\text{min}} \Big\{ \omega_j \Omega_j^{(m)}(M_j^{(m)}) \Big\} \text{ , wherein } \bigcup_i M_j^{(m)} = M_i^{(m-1)} \text{ and with }$$

$$S(b^M, j') = \sum_n \omega_n S_n(j_n^M, j')$$
, or

$$S(b^M, j') = \prod_n (S_n(j_n^M, j'))^{\omega_n}$$
, or

$$S(b^M, j') = \max_{n} \{ \omega_n S_n(j_n^M, j') \}$$
, or

$$S(b_n^M,j^{\iota}) = \underset{n}{min} \Big\{ \omega_n S_n(j_n^M,j^{\iota}) \Big\} \,. \label{eq:solution}$$

- 18. (Amended) The method according to [one of the preceding claims] <u>claim 1</u>, wherein, after the recognition of each structure, a step for determining the significance of the recognition is provided.
- 21. (Amended) The method according to [one of the preceding claims] claim 1, wherein, in addition, each structure is associated with the reference images corresponding to the reference graphs and/or the reference graphs from the reference bunch graphs for which the values of the graph comparison functions lie within a predetermined range.
- 22. (Amended) The method according to [one of the preceding claims] <u>claim 1</u>, wherein the colour information comprises hue values and/or colour saturation values and/or intensity values determined from the reference image data and the image data, respectively.
- 23. (Amended) The method according to [one of the claims 1 to 22] <u>claim 1</u>, wherein the step of providing the reference graphs and the reference bunch graphs, respectively, comprises fetching the reference graphs and the reference bunch graphs from a central and/or decentralized data base.
- 24. (Amended) The method according to [one of the preceding claims] <u>claim 23</u>, wherein a regular grid is used as a net-like structure of the reference graph, the nodes and links of said regular grid defining rectangular meshes.
- 25. (Amended) The method according to [one of the claims 1 to 23] <u>claim 1</u>, wherein an irregular grid is used as a net-like structure of the reference graph, the nodes and links of said irregular grid being adapted to the structure to be recognized.
- 27. (Amended) The method according to [one of the preceding claims] <u>claim 1</u>, wherein Gabor filter functions and/or Mallat filter functions are used as class of filter functions for convolution with the reference image data and image data, respectively.

- 28. (Amended) The method according to [one of the preceding claims] claim 1, wherein Gabor filter functions and/or Mallat filter functions are used as class of filter functions for convolution with the colour-segmented reference image data and image data, respectively.
- 29. (Amended) The method according to [one of the preceding claims] <u>claim 1</u>, wherein the projection of the net-like structure of the specific reference graph and/or the specific reference bunch graph comprises centering the reference graph and/or the specific reference bunch graph in the image.
- 31. (Amended) The method according to claim [29 or] 30, wherein the projection of the net-like structure of the specific reference graph and/or of the specific reference bunch graph comprises scaling the centered reference graph and the centered reference bunch graph, respectively.
- 32. (Amended) The method according to claim 31 [in combination with claim 30], wherein the displacement and the scaling and the rotation of the centered reference graph and of the centered reference bunch graph, respectively, are carried out simultaneously.
- 33. (Amended) The method according to [one of the claims 29 to 32] <u>claim 29</u>, wherein the projection of the net-like structure comprises local distortions of the centered reference graph.
- 35. (Amended) The method according to [one of the claims 30 to 34] <u>claim 30</u>, wherein the displacement and/or the scaling and/or the rotation are determined on the basis of a comparison between the image graph and the corresponding reference graph and/or the corresponding reference bunch graph.